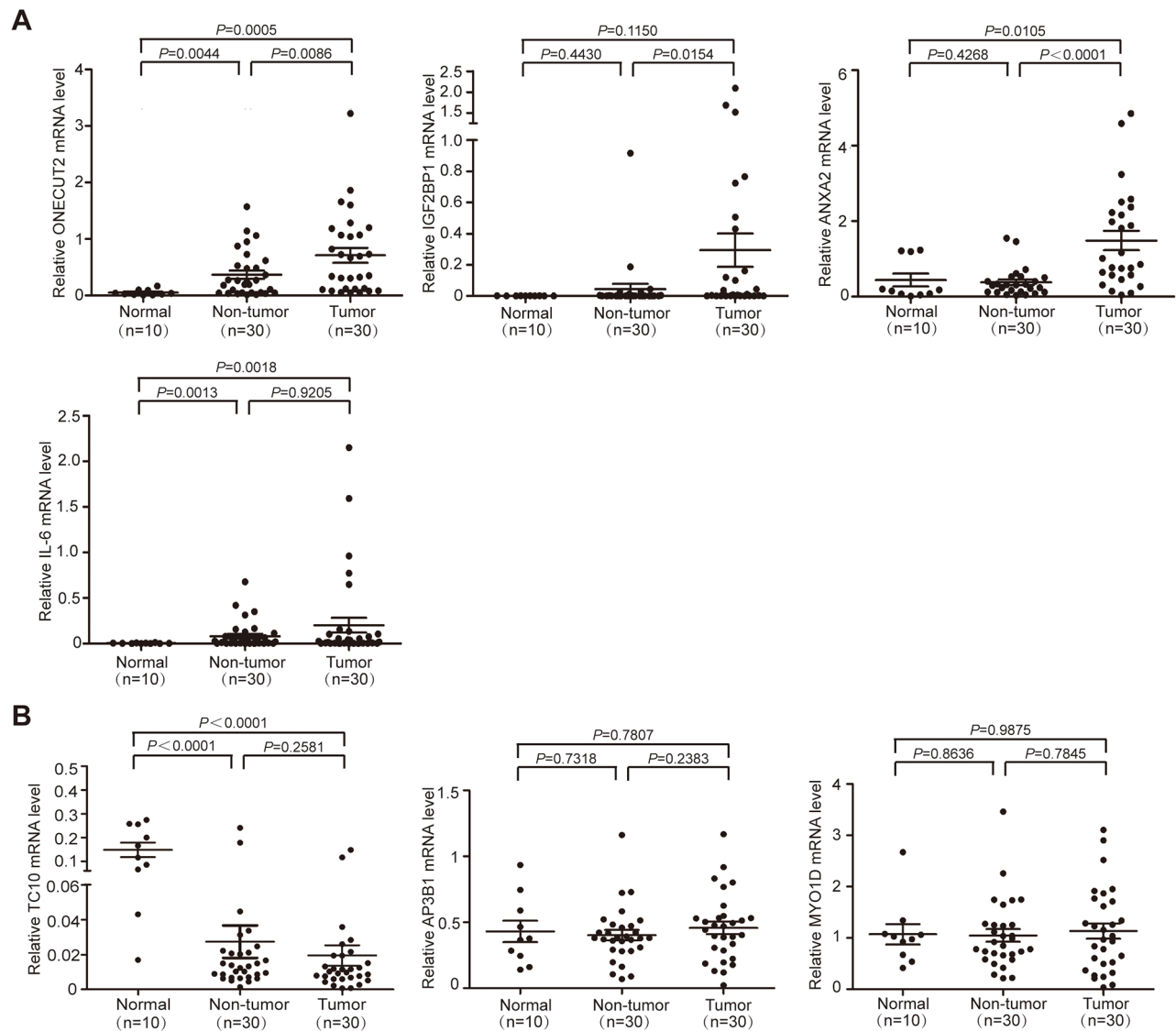


SUPPLEMENTARY FIGURE AND TABLES



Supplementary Figure S1: A. Relative mRNA level of ONECUT2, IGF2BP1, ANXA2 and IL-6 genes in 30 paired HCC tumor tissues and adjacent non-tumor tissues, as well as 10 normal liver tissues. Data were represented as mean \pm SEM. B. Relative mRNA level of TC10, AP3B1 and MYO1D genes in 30 paired HCC tumor tissues and adjacent non-tumor tissues, as well as 10 normal liver tissues. Data were represented as mean \pm SEM.

Supplementary Table S1: miR-9 target gene list predicted by bioinformatic softwares.

Supplementary Table S2: Gene expression profiling in 6 pairs of primary HCC tissues.

Supplementary Table S3: The correlation between gene expression status and patients clinicopathologic features.

Supplementary Table S4: Clinicopathological features of HCC patients cohort

Clinicopathological Features		Cases <i>n</i> (%)
		<i>n</i> = 85*
Gender		
	Male	68 (80.00)
	Female	17 (20.00)
Age		
	Median (Range)	53 (21–76)
Cirrhosis		
	Yes	76 (89.41)
	No	7 (8.23)
	N/A	2 (2.35)
Portal Vein Invasion		
	Present	26 (67.06)
	Absent	57 (74.14)
	N/A	2 (2.35)
Tumor Size		
	≥5 cm	60 (70.59)
	<5 cm	17 (20.00)
	N/A	8 (9.41)
Tumor Encapsulation		
	Complete	68 (80.00)
	Uncomplete	9 (10.59)
	N/A	8 (9.41)
Intrahepatic Metastasis		
	Absent	34 (40.00)
	Present	49 (57.65)
	N/A	2 (2.35)
AFP		
	<400	40 (47.06)

(Continued)

Clinicopathological Features		Cases n (%)
	≥400	42 (49.41)
	N/A	3 (3.53)
Virus Infection Background		
	HBV	72 (84.7)
	HCV	2 (2.4)
	Others	11 (12.9)
HBsAg		
	Positive	72 (84.71)
	Negative	12 (14.12)
	N/A	1 (1.17)
HBeAg		
	Positive	2 (2.35)
	Negative	81 (95.30)
	N/A	2 (2.35)
BCLC		
	A	33 (38.82)
	B+C	49 (57.65)
	N/A	3 (3.53)
Survival		
	1 year	58 (68.33)
	2 year	47 (55.29)
	3 year	40 (46.67)
	4 year	28 (33.33)
	5 year	23 (26.67)
	N/A	22 (25.88)

Note: All patients were from the local ethnic Chinese Han population.

*The clinicopathological parameters of two patients are not available.

Supplementary Table S5: Primers sequences for the methylation detection and the size of the PCR products

Gene name	Forward (5'-3')	Reverse (5'-3')	Size (bp)
mir-9-1	CCGGCACC GCGGCTCC CCATTTCCAT	CTCCACTGCCCTTCTCTG GAAGATCGA	108
mir-9-2	TGTGTGCTGCGGCCGTGCTGTGA	TGCAGCCTGAGGGCCGACGATA	136
mir-9-3	CCGTGAACGCCGAGGCCATT	CGCGGAGCGCTTAGAGAGCC	222

Note: the annealing temperature of the primers are 74°C.

Supplementary Table S6: Primer sequences for the detection of target genes expression

Gene name	Forward (5'-3')	Reverse (5'-3')	Size (bp)
IL-6	TTCGGTACATCCTCGACGGCATC	CAGCTCTGGCTTGTTCCCTCACTAC	258
AP3B1	GATGTTGAAGAGTGGGGGCA	TGTGCCAATACAGCTGAGCA	274
TC10	ACTGACCTTGATGGGTTTGG	TGGCCTTATTTGAGGCAGTG	331
ONECUT2	AGGCTGCCTACACCGCCTATC	GCCGTCCAGGATCGAGGCCAT	344
IGF2BP1	GCGATGAAGGCCATCGAAAC	AGCTTCATGATGGCTTGCTT	269
MYO1D	GAGCTGTATGAGAGACCGCC	CTGCTCTCTGACTGGGGTTG	181
ANXA2	TCCCGCTTGGTTGAACACAT	CATTGCTGCGGTTGGTCAA	240
CTBP	TTCACCGTCAAGCAGATGAGAC	CTGGCTAAAGCTGAAGGGTCC	156

Note: the annealing temperature of the primers are 60°C.

Supplementary Table S7: Primer sequences for luciferase reporter plasmid construction

Gene name	Forward (5'-3')	Reverse (5'-3')
IL6-3'UTR	GGGCCCAGGGGCTCTTCGGCAAAT	CTCGAGCTGGCTCTGAAACAAAGGATA
AP3B1-3'UTR	GGGCCCCCTGTCCTGTCTCAGGGGTA	CTCGAGGAGAAAACGCCACATGGATT
TC10-3'UTR	GGGCCCAGTACCTTGATGGGTTTGG	CTCGAGTGGCCTTATTTGAGGCAGTG
ONECUT2-3'UTR	GGGCCCCGGGTTTTTCTCATCCATCC	CTCGAGTCACATGAAAACGAGGCTGT
IGF2BP1-3'UTR	GGGCCCCCTCCTCCCAGTCCTTATC	CTCGAGTCGAAAGCTGGCTATTGCTT
MYO1D-3'UTR	GGGCCCCGCCCTGTAAGATTTCCCTT	CTCGAGTGTCCAGGTGCTCTGACTTG
ANXA2-3'UTR	GGGCCCCTGTGAGGGTGACGTTAGCA	CTCGAGGAAAGCAGGGCCACAAAGTA
MTHFD1L-3'UTR	GGGCCCCGATGCAGACTCCTGAAACA	CTCGAGGCCGAACACCATACTCCACT
HSPC159-3'UTR	GGGCCCAGGCACTGAAGTGACCATGT	CTCGAGCACGGAACAGGCTGAATATG
KIF23-3'UTR	GGGCCCCACGGACCTCAGCTACATCA	CTCGAGTCATCTAAGACAAACACTTGTGTGAA
GLS-3'UTR	GGGCCCCGCATGGAGACAGGTAGCAT	CTCGAGGAGCGCTCAGGATACAGAAAA
HLTF-3'UTR	GGGCCCTCAGACCTTTTATACTTTTGACCA	CTCGAGGGAAAAATAAAAACCTGTGCTAACC
SGOL1-3'UTR	CAGGGTTTCTCCATGTTGGT	GGGAAAAATAGAGATGCCAGAA
LMNA-3'UTR	GGGCCCTTCTCCTCCCTTCTTTTCC	CTCGAGGGCTCAAGCTGTCCTCTCTC
EHF-3'UTR	GGGCCCTTATTCTGCCTGGCTTGG	CTCGAGACAGTCAAATGCTGGGAAGG
PIK3R3-3'UTR	GGGCCCCCACGAAGAAGGCTGTTTA	CTCGAGAAACAGGCAGGAAGGACAGA
FAM13C-3'UTR	GGGCCCCGACACTTGTTAGGGAA	CTCGAGGTAAACCAAAGATTAGC
IGF2BP3-3'UTR	GGGCCCCAGGTAAAGCAGCACCAACA	CTCGAGAGTTGCCTGGTCTCAGAAA
RAB11FIP4-3'UTR	GGGCCCCGCTACCTACCTCCCCGTTTC	CTCGAGCTGCGTGGAGAATGAAGACA

Note: the annealing temperature of the primers are 57–65°C.